WASHINGTON DEPARTMENT OF ECOLOGY

ENVIRONMENTAL ASSESSMENT PROGRAM

FRESHWATER MONITORING UNIT

STREAM DISCHARGE TECHNICAL NOTES

MANUAL STAGE HEIGHT STATION

STATION ID: 35D080

STATION NAME: Asotin Creek below George Creek

WATER YEAR: 2005

AUTHOR: Mitch Wallace

Introduction

Watershed Description

Asotin Creek is a tributary of the Snake River, flowing through the town of Asotin in southeastern Washington. The area is semi-arid, with land used as pasture/rangeland, forest, and cropland.

Asotin Creek contains summer steelhead, spring Chinook, and bull trout. All of these are listed as threatened under the Endangered Species Act.

Gage Location

The "Asotin Creek below George Creek" site is located four miles southeast of the town of Asotin, off Asotin Creek Road. It is located on the left bank.

Table 1.

Drainage Area (square miles)	302 (USGS)
Latitude (degrees, minutes, seconds)	46° 19' 39" N
Longitude (degrees, minutes, seconds)	117° 06' 11" W
Primary Gage Index Type	Staff
Secondary Gage Index Type	n/a

Error Analysis

Overall Rating Error Percentage	10.6

Rating Table(s)

Table 2. Rating Table Summary

Rating Table No.	1	2	101
Period of Ratings	2/9/05 to 4/6/05	4/6/05 to 7/29/05	7/29/05 to 9/30/05
Range of Ratings (cfs)	18 to 182	18 to 182	18 to 182
No. of Defining Measurements	5	5	5
Rating Error (%)	10.6	10.6	10.6

Rating Table No.			
Period of Ratings			
Range of Ratings (cfs)			
No. of Defining Measurements			
Rating Error (%)			

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Period of Ratings			
Range of Ratings (cfs)			
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Rating Error (%)			

Narrative

Ratings 1, 2, and 101 are all the same ratings. Ratings 1 and 101 are qualified as estimated due to significant periods in which no flow measurements were conducted.
Five discharge measurements, ranging from 29 to 91 cfs, were taken throughout the water year. Measurement #1 was taken on September 28, 2004. There was a 7-month gap between measurements #1 and #2.

Discrete Flow Record

Table 3. Discrete Flow Record Summary

Number of Discrete Stage Readings	35	
Maximum Observed Stage (feet) and Date	2.25	5/11/2005
Maximum Predicted Discharge (cfs) and Date	159	5/11/2005
Minimum Observed Stage (feet) and Date	1.31	8/26/2005
Minimum Predicted Discharge (cfs) and Date	27	8/26/2005
Range of Stage (feet) and Discharge (cfs)	0.94	132

Narrative

Modeled Discharge

Table 4. Model Summary

Model Type (Slope conveyance, other, none)	n/a
Range of Modeled Stage (feet)	n/a
Range of Modeled Discharge (cfs)	n/a
Valid Period for Model	n/a
Model Confidence	n/a

Surveys

Table 5. Survey Type and Date (station, cross section, longitudinal)

Type	Date
n/a	n/a

Activities Completed
